



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,315	02/05/2001	Albertus Van Zanten	502-010097-US(PAR)	3383
2512	7590	09/20/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2638	
DATE MAILED: 09/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/777,315	Applicant(s) ZANTEN ET AL.	
	Examiner Hanh Phan	Art Unit 2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2001.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-29 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 20-29 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 06/29/2005.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claim 26 recites the limitation "the connection part" in line 2. There is insufficient antecedent basis for this limitation in the claim.

-Claim 28 claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. See In Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) and see MPEP 2173.05(p) section II.

Claim Rejections - 35 USC § 101

4. Claims 28 and 29 are rejected under 35 U.S.C. 101 based on the theory that the claims are directed to neither a "process" nor a "machine," but rather embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. Id. At 1551.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilliland et al (US Patent No. 6,160,647).

Regarding claim 20, referring to Figure 3, Gilliland teaches electro-optical connector module comprising:

an optical connection section (i.e., transmitting optical sub-assembly 104 and receiving optical sub-assembly 106, Fig. 3) for receiving and/or transmitting optical signals, at least one optical transmitter circuit and/or optical receiver circuit and at least one electro-optical converter for respectively converting electrical signals into optical signals or vice versa (col. 9, lines 37-48);

the module comprising at least two substantially flat and substantially parallel electrically insulating sheets on which the transmitter circuit and/or receiver circuit and the converter are mounted (i.e., second carrier printed circuit board 110 and third carrier printed circuit board 114 on which the transmitting optical sub-assembly 104 and the receiving optical sub-assembly 106 are mounted, Fig. 3, col. 9, lines 60-67 and col. 10, lines 1-6);

the module further comprises an electrical connection section (i.e., main transceiver printed circuit board 102, Fig. 3) for receiving and/or transmitting electrical signals and wherein the electrically insulating sheets extend in a direction between the electrical connection section and the optical connection section (col. 9, lines 1-67 and col. 10, lines 1-6).

Regarding claim 21, Gilliland further teaches at least one optical transmitter circuit (104, Fig. 3), at least one optical receiver circuit (106, Fig. 3) and at least two electro-optical converters for respectively converting electrical signals into optical signals and vice versa, wherein the optical transmitter circuit and a first converter are mounted on a first sheet (110, Fig. 3) and the optical receiver circuit and a second converter are mounted on a second sheet (114, Fig. 3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilliland et al (US Patent No. 6,160,647) in view of Paurus et al (US Patent No. 5,448,511).

Regarding claims 22 and 28, Gilliland teaches all the aspects of claimed invention except fails to teach the sheets are connected by means for a flexible sheet

material. However, Paurus in US Patent No. 5,448,511 teaches sheets are connected by means for a flexible sheet material (Figs 1-7, col. 3, lines 7-38 and col. 4, lines 21-45). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the sheets are connected by means for a flexible sheet material as taught Paurus in the system of Gilliland. One of ordinary skill in the art would have been motivated to do this since Paurus suggests in column 3, lines 7-38 and col. 4, lines 21-45 that using such the sheets are connected by means for a flexible sheet material have advantage of allowing the components can be attached to the sheets with maximum of space is available and form an integral whole and minimize the size of the device.

Regarding claim 23, the combination of Gilliland and Paurus teaches a least three substantially flat and substantially parallel electrically insulating sheets that are substantially square or rectangular and wherein the first and the second sheet are connected to adjacent sides of the third sheet by means of a flexible sheet material (see Figs. 1-7 of Paurus).

9. Claims 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilliland et al (US Patent No. 6,160,647) in view of Jiang et al (US Patent No. 6,901,221).

Regarding claim 25, Gilliland teaches all the aspects of claimed invention except fails to teach a hood capable of shielding the module against electromagnetic interference. However, Jiang in US Patent No. 6,901,221 teaches a hood capable of

Art Unit: 2638

shielding the module against electromagnetic interference (Fig. 2, col. 7, lines 27-67 and col. 8, lines 1-49). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the hood capable of shielding the module against electromagnetic interference as taught Jiang in the system of Gilliland. One of ordinary skill in the art would have been motivated to do this since Jiang suggests in column 7, lines 27-67 and col. 8, lines 1-49 that using such the hood capable of shielding the module against electromagnetic interference has advantage of allowing reducing the electromagnetic interference.

Regarding claims 26 and 29, the combination of Gilliland and Jiang teaches the connection part comprises a housing of an insulating material for accommodating one or more contact elements and wherein the sheets are attached to the housing (Fig. 3 of Gilliland and Fig. 2 of Jiang).

Regarding claim 27, the combination of Gilliland and Jiang teaches the housing comprises building blocks to which a sheet is attached (Fig. 3 of Gilliland and Fig. 2 of Jiang).

Allowable Subject Matter

10. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 20-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone

Application/Control Number: 09/777,315
Art Unit: 2638

Page 8

number for the organization where this application or proceeding is assigned is
(571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER